

ANALYST:		VPDES NO.	
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Instrument: _____ Parameter: Total Residual Chlorine (TRC)
Method: DPD Colorimetric (HACH Pocket Colorimeter)
1/08

METHOD OF ANALYSIS:

HACH Manufacturer's Instructions (Method 8167) plus an edition of *Standard Methods*

	18 th Edition of <i>Standard Methods</i> 4500-Cl G		
	21 st Edition of <i>Standard Methods</i> 4500-Cl G (00)		
		Y	N
1)	Is a certificate of operator competence or initial demonstration of capability available for <u>each analyst/operator</u> performing this analysis? NOTE: Analyze 4 samples of known TRC. Must use a lot number or source that is different from that used to prepare calibration standards. May not use SpecV™. [SM 1020 B.1]		
2)	Are the DPD PermaChem™ Powder Pillows stored in a cool, dry place? [Mfr.]		
3)	Are the pillows within the manufacturer's expiration date? [Mfr.]		
4)	Has buffering capability of DPD pillows been checked annually? (Pillows should adjust sample pH to between 6 and 7) [Mfr.]		
5)	When pH adjustment is required, is H ₂ SO ₄ or NaOH used? [Hach 11.3.1]		
6)	Are cells clean and in good condition? [Mfr.]		
7)	Is the low range (0.01 mg/L resolution) used for samples containing residuals from 0.2.00 mg/L? [Mfr.]		
8)	Is calibration curve developed (may use manufacturer's calibration) with daily verification using a high and a low standard? NOTE: May use manufacturer's installed calibration and commercially available chlorine standards for daily calibration verifications. [18 th ed 1020 B.5; 21 st ed 4020 B.2.b]		
9)	Is the 10-mL cell (2.5-cm diameter) used for samples from 0-2.00 mg/L? [Mfr.]		
10)	Is meter zeroed correctly by using sample as blank for the cell used? [Mfr.]		
11)	Is the instrument cap placed correctly on the meter body when the meter is zeroed and when the sample is analyzed? [Mfr.]		
12)	Is the DPD Total Chlorine PermaChem™ Powder Pillow mixed into the sample? [Hach 11.1]		
13)	Is the analysis made at least three minutes but not more than six minutes after PermaChem™ Powder Pillow addition? [Hach 11.2]		
14)	If read-out is flashing [2.20], is sample diluted correctly, and then reanalyzed? [Hach 1.2 & 2.0]		
15)	Are samples analyzed within 15 minutes of collection? [40 CFR Part 136]		
16)	Is a duplicate sample analyzed after every 20 samples if citing 18 th Edition [SM 1020 B.6] or daily for 21 st Edition [SM 4020 B.3.c]?		
17)	If duplicate sample is analyzed, is the relative percent difference (RPD) ≤ 20? [18 th ed. Table 1020 I; 21 st ed. DEQ]		

PROBLEMS: